START _101_

Place encoding and transmission request in queue with selected encoding properties _124_

Allow user to optionally input metadata _122_

Continue or change deadline? _120_

Contine

Change

Display results in a graphic user interface along with estimated transmission durations, completion times and costs _118_

For each predefined screen resolution, select the top "n" table entries by Quality (for instance, using predefined screen-resolutions of 720x480, 320x240, 160x120 and "n" value of 3) _116_

Sort table B by "Quality" _114_

Select entries from Table B which have transmission times less than time remaining - if thumbnail transmission is specified Select entries from Table B which have transmission times + thumbnail transmission times less than time remaining _112_

Step through table A and multiply Media Duration by encoding efficiency indexes.

Create a second table B to hold resulting values for estimated encoding time, estimated file size, and estimated transmission time (based on bandwidth) for this specific object. _110_

Estimate cost of bandwidth _108_

Ask Operator for Deadline or Tx Time _106_

Determine Bandwidth Available _104_

Determine Duration of Media File Object _102_

FIGURE 1

Encode Queue

Transmit Queue

FIGURE 2

A - Verify Connection Information

Connection Type to Be Used: Single Channel ISDN ▼

☐ Use Prior Results for Calculations

Connection Speed For Connection: 62.50 *kbps*
Average Speed For This Connection: 1136.65 *kbps*

Figure 3A: Connection Selection Interface

B - Set Time/Encoding Parameters

Media MUST Be In By: 2 :20 PM ⇅   ☐ Producer Preview   ○ VHS Quality   ⦿ Average Quality   ○ Good Quality

Current Time: 2:15:03 PM

Figure 3B: Deadline Selection Interface

Connection Settings   _ ☐ ☒

Connection Options

Connection Name: Speed (bps)   Cost: ☑ Default Connection?   Use Prior
Single Channel ISDN   64000 $ 0   Per Min ▼   ☐ VPN In Use?   ☐ Results For
                                                                                      Calculations

○ FTP   ⦿ SnapUp
Port: 21   -OR-   Block Size: AUTO ▼   Primary Port: 8888   ☐ Satellite optimized   Current Avg:
                                       Secondary port: 8889   Send Buffer: 65536   142.0814 kbps
                                                                                      Reset

Encode Settings And Defaults

Min Low Res Bitrate: 50000 bps   Min Med Res Bitrate: 100000 bps   Min High Res Bitrate: 200000 bps

Configure Static Settings and Choose One Default:

○ Producer Preview Low Res ▼ 70000 bps   ⦿ Average Quality Medium Res ▼ 400000 bps
○ VHS Quality   Medium Res ▼ 150000 bps ○ Good Quality   Full Res ▼   600000 bps

Cancel   Set Options
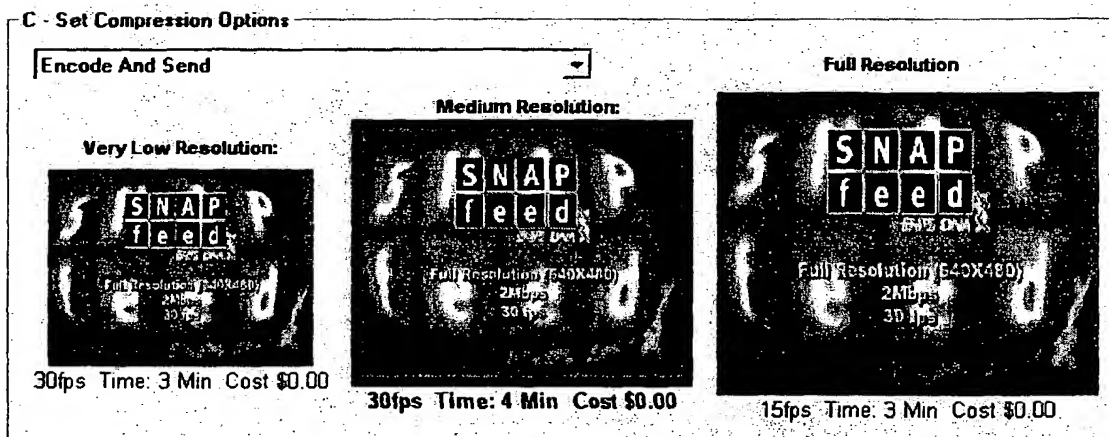
Figure 3C: Connection configuration interface

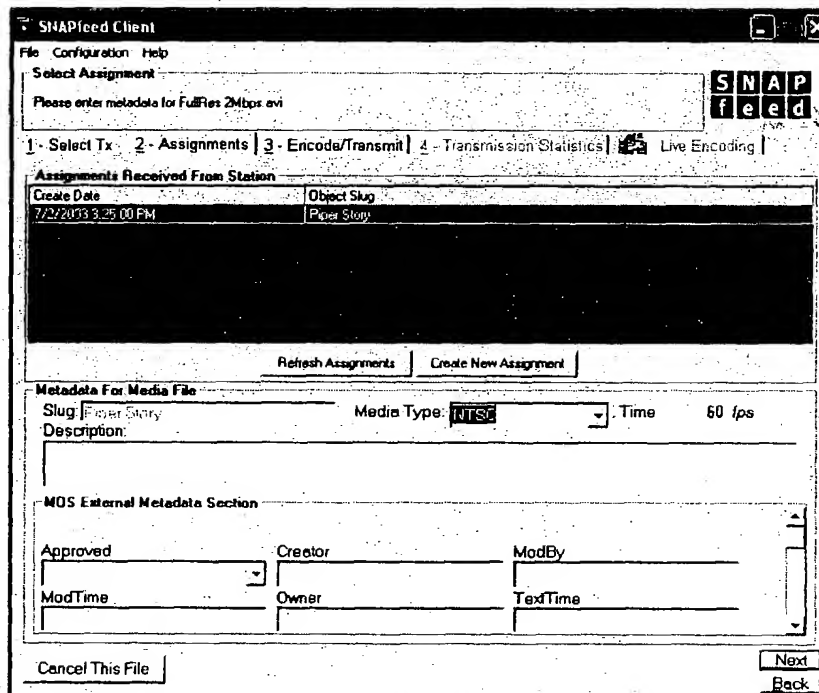**Figure 3D: Presentation of calculated encoding options to user**
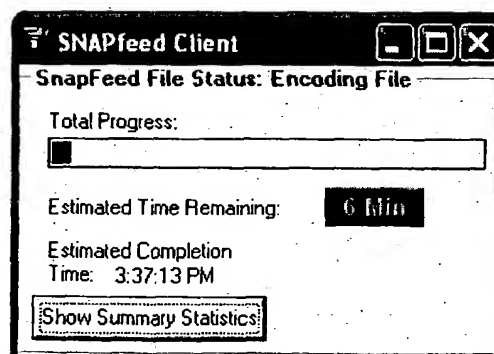

Figure 3E: Metadata entry interface

Figure 3F: Basic Processing Interface

SNAPfeed Client

File   Configuration   Help

Encoding "Piper Story"
Full Path:
d:\FullRes 2Mbps.avi

Duration (s): 18.99
File Size (kbytes): 70320.00

SNAP feed

| 1 - Select Tx | 2 - Assignments | 3 - Encode/Transmit | 4 - Transmission Statistics | Live Encoding |

Connection Information Used

Connection Type to Be Used: Single Channel ISDN

Bandwidth For This Connection: 62.50 *kbps*
Average Bandwidth: 1136.65 *kbps*

☐ Use Prior Results for Calculations

Time/Encoding Parameters Selected

Media MUST Be In By: 3 :39 PM

Current Time:

File Statistics

Uncompressed File Size: 70320.00 *kBytes*
Length: 18.99 *secs*

Encode Progress (Pass 1): 27.39% Complete

Transfer Progress: 0.00   Of   0.00   KB Sent

Total Progress: (Encoding) 11.44% Complete   0.00 *kbps*

| Start Time: | Estimated Completion | Updated Estimated |
| 03:31:09 PM | Time: 3:37:13 PM | Time: 3:36:44 PM |

Hide Full Stats | Pause Transfer | Cancel Encode

Video Resolution: 640 X 480
Video Frame Rate: 30 *fps*

Video Bit Rate:
568000 *bps*

Audio Sampling Rate: 44100 *kHz*
Audio Channels: 2

Audio Bit Rate:
32000 *bps*

Estimated File Size: 1426.36 *kbytes*
Actual File Size: ? *kbytes*

Encoder Preview

Estimated Encode Time: 3   *Minutes*
Update Encode Time: 3   *Minutes*

Estimated Transfer Time: 4   *Minutes*
Updated Transfer Time: 4   *Minutes*

Estimated Total Time: 6   *Minutes*
Updated Total Time: 6   *Minutes*

Estimated Time Remaining:
5 Min

Cost And Time Information For File

Cost To Send This File: $ 0.00

Time To Encode/Send This File: 6   *Minutes*

Back

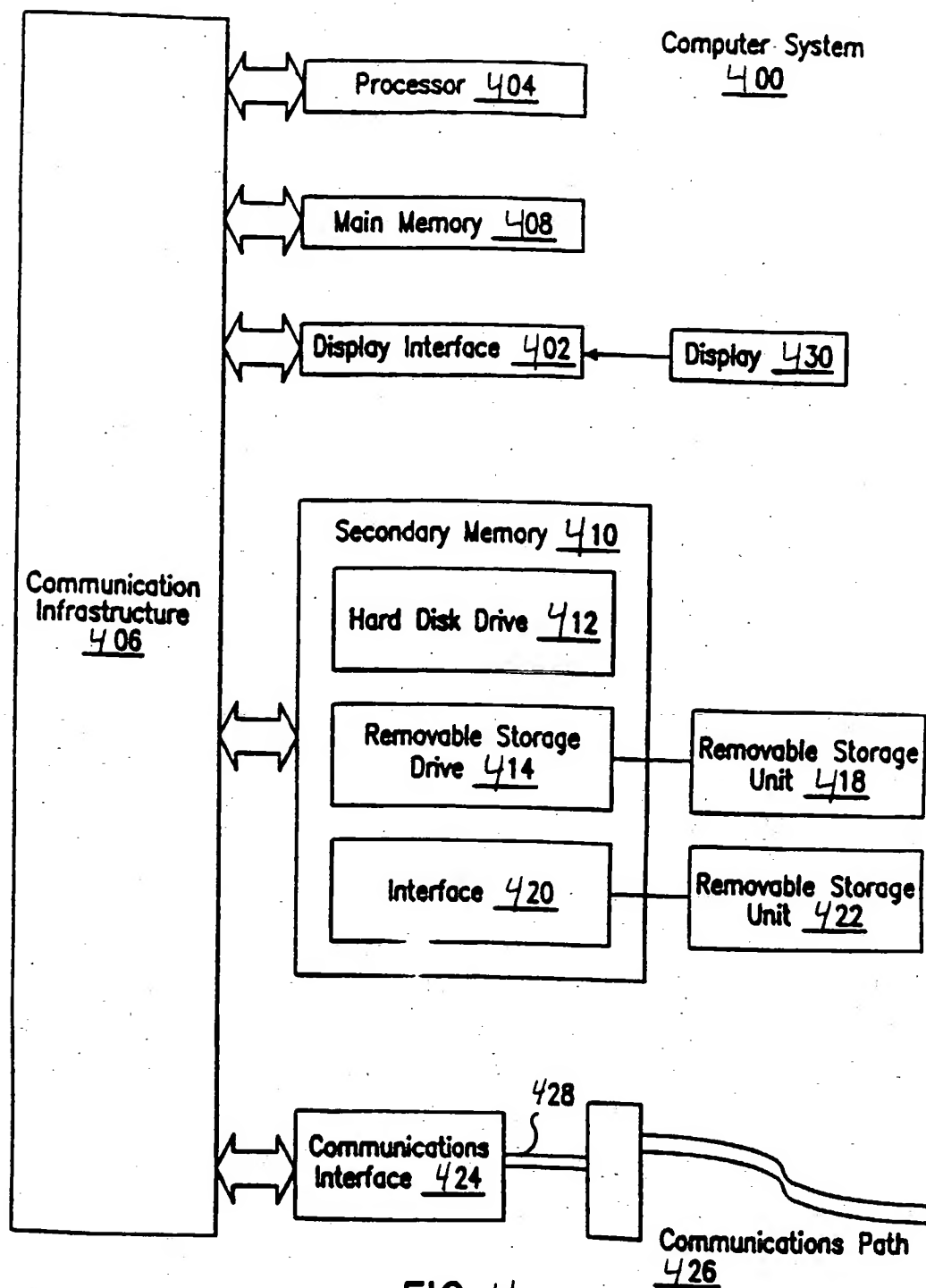**Figure 3G: Advanced Processing Interface**

Computer System
400

Processor 404

Main Memory 408

Display Interface 402 ◄── Display 430

Secondary Memory 410

Hard Disk Drive 412

Removable Storage Drive 414 ──── Removable Storage Unit 418

Interface 420 ──── Removable Storage Unit 422

Communication Infrastructure 406

Communications Interface 424

428

Communications Path 426

FIG. 4